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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,170	01/18/2002	Masahiro Kanda	020066	7598

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ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW.
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 12/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,170

Applicant(s)

KANDA, MASAHIRO

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 30 October 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iversen (3,816,641) in view of Wada (4,517,332).

Iversen discloses a stopper (14) used in a waterproof connector, the stopper disposed between a covered cable (12) and a connector housing of the waterproof connector, wherein the stopper includes a material that can bond the stopper to a covering layer of the covered cable when the stopper is heated (see the abstract).

Iversen does not specifically disclose the stopper being a rubber stopper. Wada discloses a rubber composition containing an organic rubber as a major constituent and a di-2-ethylhexyl phthalate (col. 3, lines 47-48) (re claims 1 and 2). It would have been obvious to one skilled in the art to use the rubber composition as taught by Wada for the stopper of Iversen since the rubber composition taught

by Wada has an excellent non-tackiness such that it can be easily handling during the connection process.

The modified rubber stopper of Iversen also discloses the heating temperature during heating the stopper being higher than the temperature at which the stopper is assembled in the connector, the rubber stopper including a plasticizer soluble mutually with the resin material of the covering layer (re claims 4-6).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iversen in view of Wada as applied to claim 1 above, and further in view of Yoshino (5,519,082).

The combination of Iversen and Wada discloses the invention as claimed except for the rubber including a compound comprising at least one of silyldiyne groups. Yoshino discloses a rubber composition including a compound comprising at least one of silyldiyne groups (see abstract). It would have been obvious to one skilled in the art to use the rubber composition as taught by Yoshino for the stopper of Iversen since the rubber composition of Yoshino is improved in hardness, modulus and tear strength.

4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iversen in view of Yoshino.

Iversen discloses the invention substantially as claimed except for the stopper being a rubber stopper. Yoshino discloses a rubber composition including a bonding agent which is a straight-chain organosiloxane oligomer. It would have been obvious to one skilled in the art to use the rubber composition as taught by Yoshino for the stopper of Iversen since the rubber composition of Yoshino is improved in hardness, modulus and tear strength.

Response to Arguments

5. Applicant's arguments filed Oct. 30th 2002 have been fully considered but they are not persuasive.

Regarding claims 1, 2 and 4-6, applicant's argument is irrelevant to the claimed invention as claimed in claims 1, 2 and 4-6. Specifically, applicant argues that the Office Action's proposed combination requires that Wada's rubber composition be substituted for both the stopper 14 and the sheath 28 since Iversen teaches that both are made of the same material. In response, because the claimed invention does not recite the sheath being the same material as the stopper, there is no need for the Office Action to modify the sheath of Iversen to have the rubber

composition of Wada. However, if one skilled in the art were used the rubber composition of Wada for the stopper of Iversen, one would use the same composition for the sheath as suggested by Iversen. Applicant has not presented any argument showing that the modified rubber stopper of Iversen would not bond to the sheath 28 of Iversen when heated.

Applicant then argues that Iversen teaches using a material which resists degradation in an underwater environment for a long period of time even when subjected to a high pressure (col. 2, lines 36-38). However, this teaching is related to the connector assemblies 10, 26 and not the stopper 14 or the sheath 28. Moreover, the rubber composition taught by Wada is used to transfer oil sand which is buried in the ground. In other words, the rubber composition of Wada being used in an underground condition. Therefore, the rubber composition of Wada is suitable for being used in underground environment.

In response to applicant's argument that there is no suggestion to combine the Iversen and Wada references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837

F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so is found in the references themselves.

Regarding claims 4-6, applicant argues that the examiner has not cited where Iversen discloses plasticizer, and applicant cannot find this teaching in the reference. In response, Iversen was modified by Wada which discloses plasticizer in the composition. Therefore, the modified Iversen connector discloses plasticizer included in the resin material as stated in the last Office Action.

Regarding claim 3, applicant argues that there is no clear way to combine both Yoshino and Wada with Iversen. In response, Iversen was first modified by Wada to have a rubber stopper (as claimed in claim 1). Claim 3 depends upon claim 1 and recites the rubber stopper is now an oleo-rubber that includes a compound comprising at least one of silyldiyne groups. Therefore, the rubber composition of Yoshino is now used for the stopper of Iversen.

In response to applicant's argument that there is no suggestion to combine the Yoshino and Iversen references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so is in the references themselves. Specifically, Yoshino teaches a rubber composition having an improved hardness, modulus and tear strength.

Applicant also argues that claim 7 recites the rubber stopper being disposed between the waterproof connector and the a covered cable. This feature is disclosed in Iversen, the stopper 14 is disposed between the waterproof connector 16 and a covered cable 12.

Summary

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will

be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 3431 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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Art Unit: 2831

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A handwritten signature in black ink, appearing to read "Chau N Nguyen", with a stylized flourish at the end.

Chau N Nguyen
Primary Examiner
Art Unit 2831

CN
December 16, 2002